



December 04, 2015

Tom Moe USS Corporation P.O. Box 417 Mountain Iron, MN 55768

RE: Project: NPDES-TB Wk3 Pace Project No.: 1257326

# Dear Tom Moe:

Enclosed are the analytical results for sample(s) received by the laboratory on November 18, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heather R Zika

Haller Zto

heather.zika@pacelabs.com

**Project Manager** 

**Enclosures** 

cc: Terri Sabetti, Northeast Technical





315 Chestnut Street Virginia, MN 55792 (218) 742-1042



## **CERTIFICATIONS**

Project: NPDES-TB Wk3

Pace Project No.: 1257326

**Minnesota Certification IDs** 

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01 Alaska Certification #: UST-078 Alaska Certification #MN00064 Alabama Certification #40770 Arizona Certification #: AZ-0014 Arkansas Certification #: 88-0680 California Certification #: 01155CA Colorado Certification #Pace

Connecticut Certification #: PH-0256 EPA Region 8 Certification #: 8TMS-L Florida/NELAP Certification #: E87605

Guam Certification #:14-008r Georgia Certification #: 959 Georgia EPD #: Pace

Idaho Certification #: MN00064 Hawaii Certification #MN00064 Illinois Certification #: 200011 Indiana Certification#C-MN-01 Iowa Certification #: 368

Kansas Certification #: E-10167 Kentucky Dept of Envi. Protection - DW #90062 Kentucky Dept of Envi. Protection - WW #:90062

Louisiana DEQ Certification #: 3086 Louisiana DHH #: LA140001 Maine Certification #: 2013011 Maryland Certification #: 322

Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace Montana Certification #: MT0092 Nevada Certification #: MN\_00064 Nebraska Certification #: Pace New Jersey Certification #: MN-002 New York Certification #: 11647 North Carolina Certification #: 530

North Carolina State Public Health #: 27700

North Dakota Certification #: R-036

Ohio EPA #: 4150 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507 Oregon Certification #: MN200001 Oregon Certification #: MN300001 Pennsylvania Certification #: 68-00563

Puerto Rico Certification Saipan (CNMI) #:MP0003 South Carolina #:74003001 Texas Certification #: T104704192 Tennessee Certification #: 02818 Utah Certification #: MN000642013-4 Virginia DGS Certification #: 251 Washington Certification #: C486 West Virginia Certification #: 382 West Virginia DHHR #:9952C

Wisconsin Certification #: 999407970

Virginia Minnesota Certification ID's

315 Chestnut Street, Virginia, MN 55792 Alaska Certification #MN01084

Arizona Department of Health Certification #AZ0785 Minnesota Dept of Health Certification #: 027-137-445

North Dakota Certification: # R-203

Wisconsin DNR Certification #: 998027470 WA Department of Ecology Lab ID# C1007

Nevada DNR #MN010842015-1

Oklahoma Department of Environmental Quality



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# **SAMPLE SUMMARY**

Project: NPDES-TB Wk3

Pace Project No.: 1257326

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1257326001	SD 001 (Seep 020)	Water	11/18/15 12:00	11/18/15 14:20





# **SAMPLE ANALYTE COUNT**

Project: NPDES-TB Wk3

Pace Project No.: 1257326

Lab ID	Sample ID	Method	Analysts	Analytes analysts Reported Laboratory		
1257326001	SD 001 (Seep 020)	EPA 1664 TPH	MBL	1	PASI-M	
		USGS I-3765	BEM	1	PASI-V	

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# **ANALYTICAL RESULTS**

Project: NPDES-TB Wk3

Pace Project No.: 1257326

Date: 12/04/2015 03:56 PM

Sample: SD 001 (Seep 020)	Lab ID:	1257326001	Collecte	d: 11/18/1	12:00	Received: 11/	18/15 14:20 Ma	atrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1664 SGT-HEM, TPH	Analytical	Method: EPA	1664 TPH						
Total Petroleum Hydrocarbons	0.60J	mg/L	5.0	0.37	1		11/24/15 14:44		
USGS I-3765 TSS	Analytical Method: USGS I-3765								
Total Suspended Solids	2.8	mg/L	1.0	1.0	1		11/20/15 14:06		



## **QUALITY CONTROL DATA**

Project: NPDES-TB Wk3

Pace Project No.: 1257326

QC Batch: WET/45381
QC Batch Method: EPA 1664 TPH

EPA 1664 TPH Analysis Description:

EPA 1664 TPH

1664 SGT-HEM, TPH

Associated Lab Samples: 1257326001

METHOD BLANK: 2142968 Matrix: Water

Associated Lab Samples: 1257326001

ParameterUnitsBlank Reporting ResultReporting LimitMDLAnalyzedQualifiersTotal Petroleum Hydrocarbonsmg/L0.80J5.00.3711/24/15 14:44

Analysis Method:

LABORATORY CONTROL SAMPLE: 2142969

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Total Petroleum Hydrocarbons mg/L 20 13.7 68 64-132

MATRIX SPIKE SAMPLE: 2143013

MS 1257436001 Spike MS % Rec Parameter Units Result Conc. Result % Rec Limits Qualifiers 1.1J 7.0 Total Petroleum Hydrocarbons 21.3 28 64-132 M1 mg/L

SAMPLE DUPLICATE: 2143014

Date: 12/04/2015 03:56 PM

Parameter Units Result Result RPD Max Result RPD Qualifiers

Total Petroleum Hydrocarbons mg/L <0.41 0.75J 34

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## **QUALITY CONTROL DATA**

Project: NPDES-TB Wk3

Pace Project No.: 1257326

QC Batch: WET/21466 Analysis Method: USGS I-3765

QC Batch Method: USGS I-3765 Analysis Description: USGS I-3765 Total Suspended Solids

Associated Lab Samples: 1257326001

METHOD BLANK: 270166 Matrix: Water

Associated Lab Samples: 1257326001

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Suspended Solids mg/L ND 1.0 1.0 11/20/15 14:05

LABORATORY CONTROL SAMPLE: 270167

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Suspended Solids** mg/L 239 212 89 80-120

SAMPLE DUPLICATE: 270168

1257362002 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 24.0 0 10 Total Suspended Solids 24.0 mg/L

SAMPLE DUPLICATE: 270169

Date: 12/04/2015 03:56 PM

1257288001 Dup Max RPD RPD Parameter Units Result Result Qualifiers 184 Total Suspended Solids mg/L 180 2 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



## **QUALIFIERS**

Project: NPDES-TB Wk3
Pace Project No.: 1257326

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## **LABORATORIES**

PASI-M Pace Analytical Services - Minneapolis
PASI-V Pace Analytical Services - Virginia

#### **BATCH QUALIFIERS**

Batch: WET/45381

[BE] Batch extracted by solid phase extraction (SPE).

## **ANALYTE QUALIFIERS**

Date: 12/04/2015 03:56 PM

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: NPDES-TB Wk3

Pace Project No.: 1257326

Date: 12/04/2015 03:56 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1257326001	SD 001 (Seep 020)	EPA 1664 TPH	WET/45381		
1257326001	SD 001 (Seep 020)	USGS I-3765	WET/21466		

Required Client Information:
Company: USS Corporation
Address: P.O. Box 417 equested Due Date: tt. Iron, MN 55768 ITEM # SD 001 (Seep 020) Sample ids must be unique One Character per box. (A-Z, 0-9/, -) **SAMPLE ID** MATRIX
Dirinking Water
Water
Water
Water
Product
Soil/Soilid
Oil
Wipe
Air
Other
Tissue Project Name: Required Project Information: Project #: Purchase Order #: Report To: Tom Moe Copy To: MA A A C SE SE MAT A COM MATRIX CODE (see valid codes to left) ₹ Coul nouth SAMPLE TYPE (G=GRAB C=COMP) NPDES-TB WK3 DATE START Į M COLLECTED SIGNATURE of SAMPLER: PRINT Name of SAMPLER: The Chain-of-Custody is a LEGAL DOCUMENT. All releve The section of the section o CHAIN-OF-CUSTODY / Analytical Request Documen DATE 8 TIME 4711 151-8-11 SAMPLE TEMP AT COLLECTION Invoice Information: # OF CONTAINERS Pace Project Manager:
Pace Profile #: Company Name: Pace Quote: ddress: Unpreserved H2SO4 au ( West la HNO3 Preservatives and processed HCI NaOH Na2S2O3 heather.zika@pacelabs.com, Methanol Other Analy is a case. Hum TSS SSN ARZ DATE Signed: × **TRPH 1664** 11-18 12 14:20 16.4 TEMP in C Residual Chlorine (Y/N) Received on (Y/N) Custody f Sealed Cooler (Y/N) Samples Intact (Y/N) Page 10 of 11

# Pace Analytical\*

hold, incorrect preservative, out of temp, incorrect containers)

Document Name:

Sample Condition Upon Receipt Form

Document No.: F-VM-C-001-Rev.09

Document Revised: 23Feb2015

Page 1 of 1
Issuing Authority:

Pace Virginia, Minnesota Quality Office

Sample Condition Clie Upon Receipt	nt Name:			Project	#: W0#:1257326	
Courier: F	ed Ex UPS	USPS		lient		
	ommercial Pace	Other:			1257326	
Tracking Number:	· · · · · · · · · · · · · · · · · · ·		<del></del>			
Custody Seal on Cooler/B	ox Present? Yes	lo	Seals in	tact?	Yes No Optional: Proj. Due Date: Proj. Name:	
Packing Material: Bu	bble Wrap Bubble Bag	s 🗀 No	ne [	]Other:_	Temp Blank? 🗖 Yes 🗍 No	
Thermometer Used:	140792808	Type of I	ce: 🔼	Wet [	Blue None Samples on ice, cooling process has begun	
Cooler Temp Read °C: 4 Cooler Temp Corrected °C: 4 Biological Tissue Frozen? Yes No NA Temp should be above freezing to 6°C Correction Factor: Date and Initials of Person Examining Contents: 11-18-15 CC  Comments:						
Chain of Custody Present?		Yes	□No	□N/A	1.	
Chain of Custody Filled Ou	· <del></del>	ØYes	□No	□N/A	2.	
Chain of Custody Relinquis		Z Yes	□No	□N/A	3.	
Sampler Name and Signatu		· [Z]Yes	□No	□N/A	4.	
Samples Arrived within Ho		Z Yes	□No	□N/A	5.	
Short Hold Time Analysis		Yes	[Z]No	□N/A	6.	
Rush Turn Around Time Re	equested?	Yes	ZΝο	□N/A	7.	
Sufficient Volume?		☑Yes	□No	□N/A	8.	
Correct Containers Used?		✓Yes	∏No	□N/A	9.	
-Pace Containers Used?		Yes	□No	□N/A		
Containers Intact?		<b>∠</b> Yes	□No	□N/A	10.	
Filtered Volume Received	or Dissolved Tests?	☐Yes	□No	⊿N/A	11. Note if sediment is visible in the dissolved containers.	
Sample Labels Match COC Includes Date/Time/ID/	le	Yes T	□No	□n/a	12.	
All containers needing acid checked and documented		Yes	□No	ZŽÍN/A	See pH log for results and additional preservation documentation	
Headspace in Methyl Merc	ury Container	□Yes	□No	ØN/A	13.	
Headspace in VOA Vials ( >	6mm)?	Yes	□No	[∕]N/A	14.	
Trip Blank Present?		∐Yes	□No	ĎN/A	15.	
Trip Blank Custody Seals Pr		Yes	□No	ØN/A		
Pace Trip Blank Lot # (if pu	rchased):	•				
CLIENT NOTIFICATION/RES	OLUTION				Field Data Required? Yes No	
Person Contac	cted:				Pate/Time:	
Comments/Resolu						
	,					
FECAL WAIVER ON FILE Y N TEMPERATURE WAIVER ON FILE Y N						
Project Manager Review:    Date:   1   9   5						